

CALIFORNIA ENERGY COMMISSION1516 NINTH STREET
SACRAMENTO, CA 95814-5512**NOTICE OF PROPOSED AWARDS****Energy-Related Environmental Research Relevant to California****PON-08-003****April 17, 2009**

On December 8, 2008 the California Energy Commission (Energy Commission) released a competitive grant solicitation for “Energy-Related Environmental Research Relevant to California” under the Energy-Related Environmental Research Program of the Public Interest Energy Research (PIER) Program. The solicitation announced that up to \$4.25 million in funding was available. Funding was divided into four separate research topics: Air Quality, Aquatic Resources, Terrestrial Resources, and Community Scale Energy Research.

The proposals were screened, reviewed, evaluated, and scored using the criteria prescribed in the solicitation. Based on the Review Team’s scores and suggested funding levels, the Energy Commission’s Research, Development, and Demonstration (RD&D) Committee proposes to award over \$2.5 million and fund seven passing projects for this solicitation. This Notice of Proposed Awards is hereby issued pursuant to those recommendations.

The attached table, Committee Funding Recommendations for Grant Solicitation PON-08-003, identifies each of the applicants recommended to receive funding, the project title, the amount of funding recommended by the RD&D Committee, and scoring information.

Final approval of these awards rests with the Energy Commission, which will consider each project recommended by the RD&D Committee during a publicly noticed Business Meeting at the Energy Commission in Sacramento, California.

Persons wishing further information about this matter may contact Sandra Fromm at (916) 653-9355, sfromm@energy.state.ca.us.

KAREN DOUGLAS
Energy Commission Chair
Presiding Member, RD& D Committee

Research Topic: Terrestrial Resources

| Proposal Number | Applicant | Project Title | Funding Requested | Recommended Funding | Match Funding | Final Score | Rank |
|-----------------|--|---|-------------------|------------------------|---------------|-------------------------------|------|
| 14 | USDA, Forest Service, Pacific Southwest Research Station | Improving the Accuracy and Cost-effectiveness of Pre-Construction and Operations Monitoring Efforts for Bats and Birds at Wind Energy Facilities in California | \$550,948 | \$550,948 | \$200,389 | 91.1 | 1 |
| 17 | Kenneth Shawn Smallwood | Comparing Utilization Data for Siting New Wind Power Generation | \$181,800 | \$181,800 | \$15,400 | 82.2 | 2 |
| 3 | EDM International, Inc. | Evaluating the Effectiveness of Avian Interaction Mitigating Measures and Processes | \$165,516 | \$165,516 | \$37,000 | 81.7 | 3 |
| 18 | Triple HS, Inc. d/b/a H.T. Harvey & Associates | Radar, Acoustic and Observational Study to Assess Bat and Bird Movements and Mortality Relative to Old and New Wind Tower Structures | \$732,411 | \$732,411 ¹ | \$0 | 73.2 ² | 4 |
| 10 | California Wind Energy Association | Improving Methods to Assess and Mitigate Impacts of Wind Energy Development on Birds and Bats in California: Synthesizing and Analyzing a Database to Empirically Evaluate Key Issues, and Validating Fatality Estimation Methods | \$750,000 | \$442,078 ³ | \$511,343 | 71.0 ⁴ | 5 |
| 6 | Wildlife Research Institute, Inc. | Golden Eagle Movements throughout California Using Satellite Telemetry to Determine Use of Wind Resource Areas | \$749,979 | \$0 | | Did not pass technical review | |
| 4 | The Regents of the University of California (Wildlife Health Center, UC Davis School of Vet. Medicine) | Evaluating Cumulative Population Impacts of Mortality due to Energy Utility Systems and Compensatory Mitigation Options for Golden Eagles in California | \$745,931 | \$0 | | Did not pass technical review | |
| 9 | EchoTrack Inc. | Monitoring the re-powering of Altamont Pass and the effects on California's bird populations using remote sensing 3-D | \$289,471 | \$0 | | Did not pass technical review | |
| 19 | Predatory Bird Research Group | Improving the Accuracy and Cost-effectiveness of Pre-Construction and Operations Monitoring Efforts for Bats and Birds at Wind Energy Facilities in California | \$722,635 | \$0 | | Did not pass technical review | |

¹ Recommended funding for Proposal # 18 is conditional upon minor modifications to the study design.

² Proposal received 1 CBE preference point, which is included in the final score.

³ For Proposal # 10, funding is recommended only for Tasks 1, 3, and 4. Task 2 is not recommended for funding.

⁴ Proposal received 1 CBE preference point, which is included in the final score.

Research Topic: Aquatic Resources

| Proposal Number | Applicant | Project Title | Funding Requested | Recommended Funding | Match Funding | Final Score | Rank |
|-----------------|--|---|-------------------|---------------------|---------------|---------------------------------------|------|
| 11 | The Regents of the University of California (UC Davis) | Juvenile and adult hardhead thermal tolerances and preferences: Temperature preference, critical thermal limits, active and resting metabolism and blood-oxygen equilibria | \$441,797 | \$441,797 | \$82,008 | 85.6 ⁵ | 1 |
| 12 | US Forest Service | Hydropower Generation Effects on Riverine Populations of Western Pond Turtles: Assessing Effects in the Sierra Nevada, Evaluating Methods for FERC Re-licensing and Field Studies of Altered Water Temperatures and Flows | \$498,027 | \$0 | | Did not pass technical review | |
| 15 | John Lawson | Wave Energy-Based Gas Fuel Production | Not specified | \$0 | | Did not pass administrative screening | |

Research Topic: Community Scale Energy Research

| Proposal Number | Applicant | Project Title | Funding Requested | Recommended Funding | Match Funding | Final Score | Rank |
|-----------------|---------------------------------------|---|-------------------|---------------------|---------------|-------------------------------|------|
| 2 | AltoStratus Inc. | Ranking and Prioritizing the Deployment of Community-Scale energy Technologies Based on their Indirect Effects in CA Climate Zones | \$120,492 | \$120,492 | \$22,266 | 84.8 ⁶ | 1 |
| 1 | Lawrence Berkeley National Laboratory | Energy Savings from Air Temperature Reduction in Cool Communities | \$300,000 | \$0 | | Did not pass technical review | |
| 7 | Community Environmental Council | One Stop Shop - Residential ESCO Model for Integrated Demand Side Management in Existing Residential and Small commercial Buildings | \$75,000 | \$0 | | Did not pass technical review | |

⁵ Proposal received 3 CBE preference points, which are included in the final score.

⁶ Proposal received 3 CBE preference points, which are included in the final score.

Research Topic: Air Quality

| Proposal Number | Applicant | Project Title | Funding Requested | Recommended Funding | Match Funding | Final Score | Rank |
|-----------------|-------------------------|---|-------------------|---------------------|---------------|-------------------------------|------|
| 8 | University of CA-Irvine | Air Quality Impacts of the More Renewable Energy Future in California | \$499,414 | \$0 | | Did not pass technical review | |

Summary of Proposed Awards

| Proposal Number | Applicant | Project Title | Funding Requested | Recommended Funding | Match Funding | Final Score | Rank |
|--|--|--|--------------------|------------------------|------------------|-------------|------|
| Terrestrial Resources | | | | | | | |
| 14 | USDA, Forest Service, Pacific Southwest Research Station | Improving the Accuracy and Cost-effectiveness of Pre-Construction and Operations Monitoring Efforts for Bats and Birds at Wind Energy Facilities in California | \$550,948 | \$550,948 | \$200,389 | 91.1 | 1 |
| 17 | Kenneth Shawn Smallwood | Comparing Utilization Data for Siting New Wind Power Generation | \$181,800 | \$181,800 | \$15,400 | 82.2 | 2 |
| 3 | EDM International, Inc. | Evaluating the Effectiveness of Avian Interaction Mitigating Measures and Processes | \$165,516 | \$165,516 | \$37,000 | 81.7 | 3 |
| 18 | Triple HS, Inc. d/b/a H.T. Harvey & Associates | Radar, Acoustic and Observational Study to Assess Bat and Bird Movements and Mortality Relative to Old and New Wind Tower Structures | \$732,411 | \$732,411 ⁷ | \$0 | 73.2 | 4 |
| 10 | California Wind Energy Association | Improving Methods to Assess and Mitigate Impacts of Wind Energy Development on Birds and Bats in California: Synthesizing and Analyzing a Database to Emprically Evaluate Key Issues, and Validating Fatality Estimation Methods | \$750,000 | \$442,078 ⁸ | \$511,343 | 71.0 | 5 |
| Aquatic Resources | | | | | | | |
| 11 | The Regents of the University of California (UC Davis) | Juvenile and adult hardhead thermal tolerances and preferences: Temperature preference, critical thermal limits, active and resting metabolism and blood-oxygen equilibria | \$441,797 | \$441,797 | \$82,008 | 85.6 | 1 |
| Community Scale Energy Research | | | | | | | |
| 2 | AltoStratus Inc. | Ranking and Prioritizing the Deployment of Community-Scale energy Technologies Based on their Indirect Effects in CA Climate Zones | \$120,492 | \$120,492 | \$22,266 | 84.8 | 1 |
| | | Total Funding | \$2,942,964 | \$2,635,042 | \$868,406 | | |

⁷ Recommended funding for Proposal # 18 is conditional upon minor modifications to the Statement of Work.

⁸ For Proposal # 10, funding is recommend only for Tasks 1, 3, and 4. Task 2 is not recommended for funding.